REMARKS

Claims 1-3, 6, 8, and 13 were rejected as anticipated by ARSLAN et al. 6,615,174. Claim 1 has been amended and reconsideration and withdrawal of the rejection are respectfully requested.

ARSLAN et al. disclose a voice conversion system that uses a codebook to transform a source voice to sound like a target voice. As explained at column 1, lines 35-46 and column 5, lines 36-61, codebooks are prepared, as a preliminary step, using processed samples of the source and target speech respectively. When the appropriate codebooks for the source and target speakers have been prepared, input speech in the source voice is transformed into the voice of the target speaker using the codebooks. Consequently, this reference has the same drawbacks as the other prior art, namely using predefined parameters calculated from samples of speech.

ARSLAN et al. do not disclose a method wherein the correction applied to the imitation audio signal (which corresponds to the model audio signal) is from a comparison of the spectra of the corresponding model audio signal to that of the imitation audio signal. Specifically, ARSLAN et al. do not disclose the acquisition step in which the imitation audio signal corresponds to the model audio signal, the spectral analysis of this imitation audio signal, or the step where the comparison of the spectra of the model audio signal and this imitation audio

signal is the basis for the subsequent correction of the imitation audio signal. As noted above, ARSLAN et al. disclose a training phase using pre-processed samples and do not apply spectral analysis to both the model and the imitation audio signals, where the imitation audio signal corresponds to the model audio signal. Accordingly, amended claim 1 avoids the rejection under §102. Claims 2-3, 6, 8, and 13 depend from claim 1 and are allowable for the same reasons.

Claims 4-5 were rejected as unpatentable over ARSLAN et al. Claims 9, 11, and 14 were rejected as unpatentable over ARSLAN et al. in view of LEE et al. ("A New Voice Transformation Method Based on Both Linear and Nonlinear Prediction Analysis") and claims 7, 10, 12, and 15 were rejected as unpatentable over ARSLAN et al. in view of GIBSON et al. 6,336,092. These claims depend from claim 1 and are allowable for the reasons set forth above. Reconsideration and withdrawal of the rejections are respectfully requested.

By way of further explanation, GIBSON et al. disclose a method of transforming a source voice to adopt characteristics of a target voice. In GIBSON et al., the transformed voice is synthesized by applying a spectral envelope of the source voice to the excitation signal component of the voice of the target. Thus, GIBSON et al. also do not disclose the steps of comparing the spectra of the model audio signal to the imitation audio signal and correcting the imitation audio signal as function of

the comparison.   LEE is similar to ARSLAN et al. in that a codebook is used for a training stage.

New claims 16-19 have been added and consideration and allowance of the new claims are respectfully requested.   The applied references, alone or in combination, do not disclose the steps of claims 18-19 wherein the first spectral analysis step includes dividing the model audio signal into a multiplicity of frequency bands and determining an intensity of the model audio signal in each of the frequency bands, wherein the second spectral analysis step includes dividing the imitation audio signal into same frequency bands as in the first spectral analysis step and determining an intensity of the imitation audio signal in each of the frequency bands, wherein the comparison step includes, for each of the frequency bands, comparing the intensity of the model audio signal to the intensity of the imitation audio signal, and wherein the correction step includes correcting the imitation audio signal so that, for each of the frequency bands, an intensity of the corrected imitation audio signal corresponds to the intensity of the model audio signal. The references also do not disclose the intensity values of new claim 16. Support for new claims 16-17 is found on page 9, lines 5-10 and Figure 2c, and page 10, lines 8-9 and Figures 1 and 5.

The applicant has specifically requested the undersigned to seek an interview with the Examiner and such is
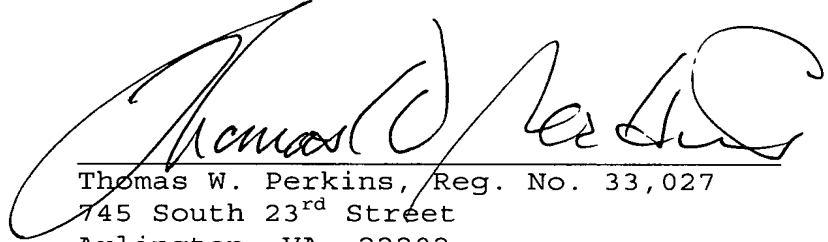
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respectfully requested after the Examiner has considered and searched for the amended and new claims.

Nevertheless, in view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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